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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,259	12/21/2001	Kurt Burger	10191/1264A	7887

7590

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EXAMINER

TURNER, ARCHENE A

ART UNIT

PAPER NUMBER

1775

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/026,259

Applicant(s)

BURGER ET AL.

Examiner

Archene Turner

Art Unit

1775

-- Th MAILING DATE of this communication app ars on the cover sheet with the correspond nc address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 78-95 is/are pending in the application.
- 4a) Of the above claim(s) 78-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 81-95 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/446,954.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 81-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how the layers are alternated from claim 81, rendering claims 81-95 indefinite. Are there two or three layers? Applicant's arguments filed 3-24-03 have been fully considered but they are not persuasive. The claim language would be much clearer if the language included an alternating first and second layer, wherein the first layer comprises a layer of hard material and the second layer comprises a silicon OR carbon layer.

Claim 82 is indefinite because the metal in 'carbon containing the metal', lacks clear antecedent basis. Is the metal in the carbon layer the same metal disclosed in claim 81? It appears it is not, but 'the metal' is the metal of the 'hard secondary group metal', although this language is also indefinite. Applicant's arguments filed 3-24-02 have been fully considered but they are not persuasive. In the specification on page 5, line 3, discloses a "hard secondary group metal", there is nothing in the specification to direct one of ordinary skill in the art to choose what those metals are, rendering the claim indefinite.

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In claims 91 & 92, it is unclear whether there are three alternating layers or two. Applicant's arguments filed 3-24-03 have been fully considered but they are not persuasive. The examiner is rejecting the language C-(WC) and C-(MeC).

Does this mean that the said hard material layer includes both carbon and WC or MeC? Or is this language disclosing that the choice for the second layer in the alternating structure with a hard material layer is carbon? The language is confusing and thus the rejection stands.

In claim 94, the limitation could not be understood. How can, for example, boron be contained in the carbon layer, and not be simultaneously present with carbon, rendering the claim indefinite. Applicant's arguments filed 3-24-03 have been fully considered but they are not persuasive. The language is confusing. Perhaps splitting up the Markush group into 2 claims would be helpful, wherein each of the Markush groups contain either boron or carbon.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 81-95 are rejected under 35 U.S.C. 102(b) as being anticipated by Keem et al (4,619,865).

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As best construed by the language of the claims, Keem et al anticipates the invention. Keem et al discloses alternating layers that may be made of the claim materials within the claimed thickness. Applicant's arguments filed 3-24-03 have been fully considered but they are not persuasive. Keem et al clearly discloses that an alternating system may include layers chosen for hardness and another chosen for lubricity (column 6, line 38-42). Components for the layer that is chosen for hardness included carbon or WC (column 2, line 64,65) and for the layer chosen for lubricity includes molybdenum boride or BC (column 3, line 14-30), which anticipates the claimed invention, and thus the rejection stands. Keem et al also discloses using metal chromium as a ductile layer and silicon or carbon for an oxidation resistant layers, which may be alternated as well.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

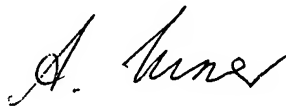
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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6. Any inquiry regarding this communication or earlier communications from the Examiner should be directed to Archene Turner, whose telephone number is (703) 308-4344. The Examiner can normally be reached Monday to Thursday from 8:30 AM to 6:00 PM.

A facsimile center has been established in Group 1700, Crystal Plaza 2, 8th floor, reception area. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is (703) 305-3599 (for official after final faxes) or (703) 305-5408 (for all other official faxes). This location should be used in all instances when faxing any correspondence to Art Unit 1774. Use of the Group 1700 center will facilitate rapid delivery of materials to Examiners in Art Unit 1775.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



**A. A. Turner**  
**Primary Examiner**  
**Group 1700**

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